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(54) **QUIET SYSTEM COOLING USING COUPLED
OPTIMIZATION BETWEEN INTEGRATED
MICRO POROUS ABSORBERS AND ROTORS**

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(57) **ABSTRACT**

Micro porous absorber structures that be tuned to attenuate noise at the blade pass frequency (BPF) of a cooling fan. The absorber may comprises a panel covered with micro-porous openings with an air gap under the panel. The size of the air gap may be adjusted dynamically to optimize noise attenuation for a fan operating at different speeds.

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